

Application Number 09/631,312
Amendment dated November 15, 2004
Responsive to Office Action mailed August 16, 2004

REMARKS

This paper is responsive to the Office Action dated August 16, 2004, which constitutes the fourth, non-final Office Action in this application. Applicant has not amended any claims. Claims 1, 3-12, 14-37 and 39-63 are still pending.

In the Office Action, the Examiner objected to claims 8-12, 33-37 and 53-58 as being dependent on a rejected base claim, but indicated that such claims include subject matter that would be allowable if rewritten into independent form.

The Examiner rejected claims 1, 3-7, 14-32, 39-52 and 59-63 under 35 U.S.C. 103(a) as being unpatentable over Hilliard et al. (USPAP 2002/0080168) in view of Yamaguchi (USPN 6,665,434). Applicant respectfully traverses the rejections in view of the following comments.

The applied references fail to disclose or suggest the inventions defined by Applicants' claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention. In particular, all of the pending independent claims (except claim 63) require obtaining information characterizing the color response of a display device associated with a client residing on a computer network by guiding the client through a color profiling process that profiles the color response of the display device, wherein the color profiling process includes estimating the gray balance of the display device. Claim 63 recites the transmission of information characterizing the color response of a display device associated with a client residing on a computer network, wherein the information includes information based on an indication gray balance, as well as gamma and black point

In support of the rejections, the Examiner cited Hilliard et al. as disclosing the invention substantially as claimed. With respect to claim 1, the Examiner characterized Hilliard et al. as disclosing the obtaining of information characterizing the color response of a display device associated with a client residing on a computer network by guiding the client through a color profiling process that includes estimating the gray balance of the display device. The Examiner recognized that Hilliard et al. does not disclose that the color profiling process includes estimating the gray balance of the display device. However, the Examiner characterized Yamaguchi as teaching a color profiling process that includes estimating the gray balance. The Examiner asserted that one of ordinary skill in the art, in view of Yamaguchi, would have

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considered it obvious to modify the Hilliard et al. system to employ a color profiling process for a display device that includes estimating the gray balance of the display device.

The Examiner stated that the modification of the Hilliard et al. system would have been obvious:

in order to accurately correct the bias in the color balance using (sic) the estimated gray balance (citing column 6, lines 58-61 and column 7, lines 11-17 of Yamaguchi) thereby effectively achieving desired/corrected color rendition with the imaging device, as such improvement [i.e. color correcting/profiling process using (sic) the estimated gray balance] is also advantageously desirable in the teaching of Hilliard et al. for providing properly/accurately correct elements [i.e., gamma, gray] of colored images in the displaying device (citing paragraphs 42, 113, 154, and 155 of Hilliard).

Based on these observations, the Examiner concluded that a person with ordinary skill in the art would have been motivated to incorporate an estimation of gray balance, into the Hilliard et al. system.

Applicants respectfully submit that the Examiner's conclusion of obviousness is improper. Yamaguchi does not disclose or suggest a color profiling process that includes estimating the gray balance of the display device, as the Examiner's analysis would suggest. In fact, the cited passages of Yamaguchi appear to have no relevance to display devices whatsoever, much less a color profiling process for a display device associated with a client residing on a computer network, as recited in Applicants' claims. A cursory reading of the cited passages of Yamaguchi reveals that Yamaguchi concerns the estimation of gray balance *in a photographic image*. More specifically, Yamaguchi concerns "objects photographed with a camera and recorded on the same photographic film, or objects whose image data is recorded with a digital still camera on the same information recording medium, or objects whose image data is recorded by photography with the same digital still camera." See Yamaguchi, column 6, lines 20-25. To the extent that Yamaguchi discusses anything relevant to display devices, Yamaguchi appears to be completely unconcerned with color profiling of such devices. Yamaguchi, quite simply, lacks any suggestion of a color profiling process includes estimating the gray balance of the display device.

It is difficult to understand how the estimation of gray balance in a photographic image, as taught by the cited passages of Yamaguchi, would have suggested modification of a color

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profiling process for a display device, to include estimation of gray balance, as recited by Applicants' claims. The Yamaguchi reference neither estimates the gray balance of a display device, nor performs any color profiling of display devices based on an estimated gray balance. Moreover, the Yamaguchi reference appears to be totally unrelated to display devices in a computer network.

As Yamaguchi bears no relationship to the profiling of color response for display devices, this reference conveys no teaching that would have suggested the advantages achievable by the claimed invention. Applicants' specification specifically describes, for example, that when the information obtained from a client in this color profiling process includes an estimation of gray balance, the color profiling process can be improved in the network setting. In particular, gray balance estimation can reduce the number of "clicks" that the user is required to make in order to achieve accurate color profiling of a display device on a computer network. As one example, when the color profiling process includes an estimation of black point, coarse gamma, fine gamma and gray balance, the color profiling process can be executed in as few as four "clicks" at the client residing on a computer network. See Applicants' specification, page 23, lines 18-31. The Hilliard system, in contrast, requires nine clicks (see Hilliard et al., paragraph 42), and lacks any suggestion of the use of gray balance, as recognized by the Examiner. Many of Applicants' other independent and dependent claims are further limited such a profiling process that includes an estimation of black point and gamma, in addition to the estimation of gray balance, as recited in claim 1.

Moreover, Applicants respectfully submit that the incorporation of any of the teachings of Yamaguchi into the Hilliard et al. system would have made no sense to one of ordinary skill in the art. To the extent that Yamaguchi discusses anything relevant to display devices, Yamaguchi appears to be unconcerned with color profiling of such devices. The bulk of Yamaguchi, including the passages cited by the Examiner, appears to be concerned with the estimation of gray balance in a photographic image based on data from a plurality of images recorded under substantially uniform conditions.

Insofar as Yamaguchi concerns photographic film, and not the profiling of display devices, the field of invention addressed by Yamaguchi is not even similar to that of the Hilliard et al. system. For this additional reason, a person of ordinary skill in the art would not have

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considered it obvious to modify the color profiling of display devices as taught in Hilliard et al., with anything taught by Yamaguchi, because these references concern totally different problems. While Hilliard concerns issues surrounding internet color in an internet setting, Yamaguchi concerns photographic film, and not the profiling of display devices whatsoever, much less color profiling in an internet setting. Thus, Hilliard and Yamaguchi are not even analogous art, and a person of ordinary skill in the art would have considered the Yamaguchi reference irrelevant to the Hilliard et al. system.

In addition, even if a person of ordinary skill in the art encountered the Yamaguchi reference, the person of ordinary skill would have found no teaching that would have led to a modification of the Hilliard et al. system to arrive at Applicants' claimed invention. It is unclear how the Hilliard et al system could even be modified according the photographic film techniques described by Yamaguchi. In particular, it is unclear how a person of ordinary skill in the art could incorporate into the Hilliard system, a process of estimating gray balance in any original image based on image data of a plurality of original images in which objects have been recorded by photography under uniform conditions, as taught in the cited passages of Yamaguchi.

Applicants also once again take issue with the Examiner's reliance on vague motivation, which has no nexus to the required modifications proposed by the Examiner. As outlined in the previous two responses to the previous two Office Actions, a general desire to achieve more accurate color, identified by the Examiner in support of the obviousness of modifying Hilliard et al. in view of Yamaguchi, is clearly inadequate to support a prima facie case of obviousness with respect to the specific requirements of Applicant's claims. Even if the vague desire to achieve more accurate color exists in the prior art, which it certainly does, such a desire is universal and provides no special insight into the particular modifications to Hilliard et al. that would have been necessary to arrive at the claimed invention.

For example, this vague notion that improved color accuracy is desirable says nothing about the desirability of a gray balance estimate in a color profiling process for display devices over a computer network. Accordingly, if one of ordinary skill in the art were seeking improved color accuracy generally, it is still unclear why the person would implement a gray balance estimate in a color profiling process for display devices on a computer network, without access to Applicants' disclosure. Hilliard et al. lacks any teaching of gray balance estimation whatsoever,

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and Yamaguchi describes gray balance estimates of a photographic image based on data from a plurality of other photographic images recorded under substantially similar circumstances. Moreover, neither Hilliard nor Yamaguchi recognize that gray balance estimation during color profiling of a display device of a client over a computer network can simplify the color profiling process in an computer network setting and reduce the number of mouse clicks required by the user to execute the color profiling process.

In contrast, Applicants' disclosure is the only teaching of record that identifies advantages associated with implementing gray balance estimation in a color profiling process for display devices on a computer network. For example, as described in Applicants' specification, a gray balance estimate may be effective in simplifying a color profiling process for display devices, such as one that relies on user input in a computer networked setting. Moreover, a gray balance estimate of a display device may help reduce the number of clicks required for accurate color profiling of the display device. Any appreciation of such advantages is completely lacking in the prior art of record. Thus, Applicants' specification appears to be the only teaching of record that would have motivated a person of ordinary skill in the art to incorporate such a feature in the color profiling process for display devices associated with clients of a computer network. However, Applicants' own disclosure cannot be relied upon in support of a prima facie case of unpatentability.

Applicants have spent considerable time, effort and expense responding to the first, second, third and now fourth non-final Office Action to date. Applicants reserve further comment at this time. However, Applicants do not acquiesce to any of the Examiner's current rejections or characterizations of the prior art. Applicants believe that all pending claims are clearly patentable over the applied references, for at least the reasons set forth above. Numerous other reasons for patentability may also exist.

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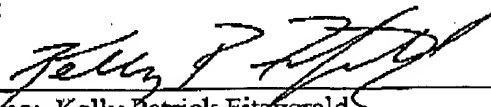
All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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